
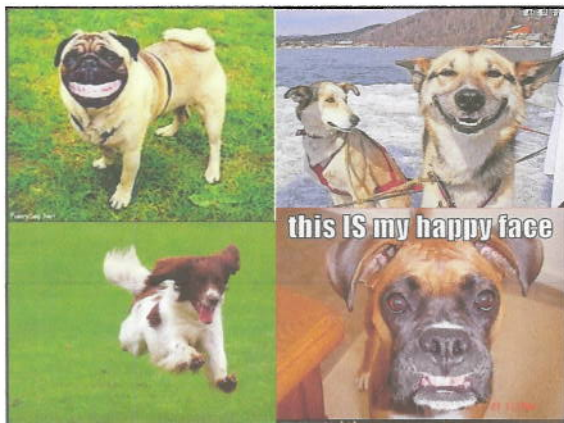
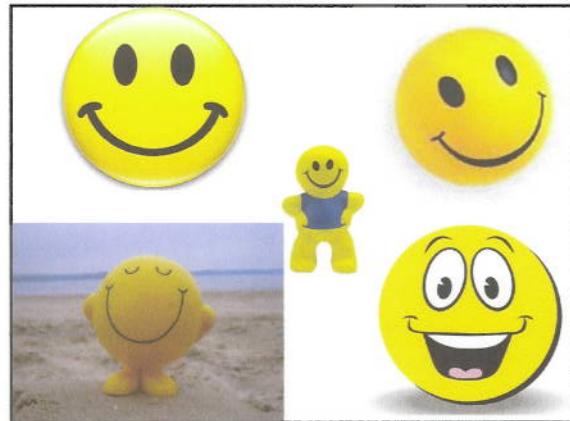



**Adding Some TEC-VARIETY to Online Courses:  
10 Principles for Jumbo Motivation**

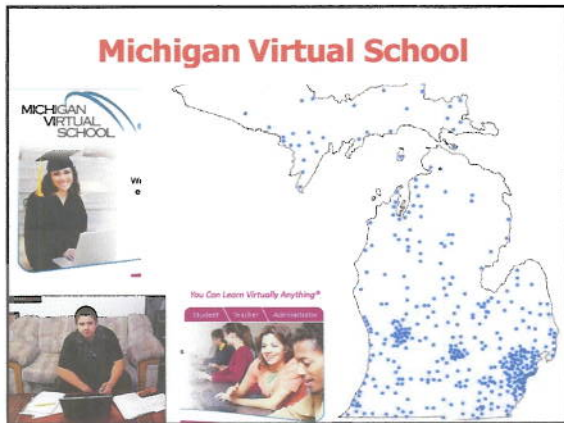
**Curt Bonk, Professor, Indiana University  
President, CourseShare, LLC  
cjbbonk@indiana.edu  
<http://mypage.iu.edu/~cjbbonk>**

**Athletes and Performers  
Going the Distance, Elizabeth Millard,  
University Business, March 2011**



**Michigan Virtual School**

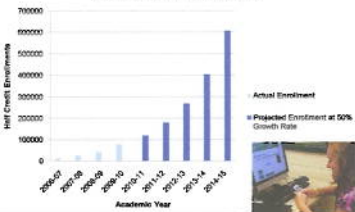


**You Can Learn Virtually Anything!**

Virtual • Online • Asynchronous


**July 2010  
North Carolina Virtual Public Schools  
(growing 79% per year)  
(per Dr. Bryan Setser, Executive Director, North Carolina  
Virtual Public School Learn and Earn Online)**

**NCVPS Predicted Growth**



Academic Year	Actual Enrollment	Projected Enrollment at 50% Growth Rate
2004-05	~10,000	~10,000
2005-06	~15,000	~15,000
2006-07	~20,000	~20,000
2007-08	~25,000	~25,000
2008-09	~30,000	~30,000
2009-10	~35,000	~35,000
2010-11	~40,000	~40,000
2011-12	~45,000	~45,000
2012-13	~50,000	~50,000
2013-14	~55,000	~55,000
2014-15	~60,000	~60,000

North Carolina Virtual Public School



**September 5, 2010**  
**Open Source goes to High School (Utah)**  
<http://www.youtube.com/watch?v=sovve-j3xGk>

Open Source goes to High School  
 opensourcemy 22 videos | Subscribe

Open High School of Utah  
 meeting the needs of the 21st century learner

DAVID WILEY  
 Founding Member, Open High School of Utah  
 Associate Professor, Brigham Young University

**Adora Svitak, age 13, World's Youngest Teacher**

Adora Svitak: What adults can learn from kids

TED

**April 12, 2011**  
**NCTM Conference Session, Free Online Degrees; iSMART: Integration of Science, Mathematics, and Reflective Teaching (iSMART), University of Houston**

You see the big picture. You find the connections.  
 Make it official - become iSMART.

Jen Chauvot and Mimi Lee, Univ of Houston

**February 4, 2011**  
**New Enrollment History Chart: Florida Virtual School (Julie Young, President & CEO)**

Year	Completion Count
2001-2002	14,830
2002-2003	13,744
2003-2004	26,109
2004-2005	26,427
2005-2006	36,733
2006-2007	68,863
2007-2008	111,875
2008-2009	154,175
2009-2010	213,376

Julie Young, President & CEO

**Indiana University High School**  
 (4,000 students and 1,400 enrolled in diploma programs)

roam

**February 16, 2011**  
**How Bill Gates' Favorite Teacher Wants to Disrupt Education, Gregory Ferenstein, Fast Company**

Khan Academy on the Gates Notes

ONMoney.com

FORTUNE

Innovation in Education

Bill Gates' favorite teacher

**June 2010**  
**Clay Shirky, NYU: How cognitive surplus will change the world, TED**  
[http://www.ted.com/talks/clay\\_shirky\\_how\\_cognitive\\_surplus\\_will\\_change\\_the\\_world.html](http://www.ted.com/talks/clay_shirky_how_cognitive_surplus_will_change_the_world.html)

**TED** Ideas worth spreading

TALKS  
 Clay Shirky: How cognitive surplus will change the world

**COGNITIVE SURPLUS**  
 CREATIVITY AND GENEROSITY IN A CONNECTED AGE

**CLAY SHIRKY**

**HERE COMES EVERYBODY**

**April 27, 2011**  
**Moodle (41+ million users in 211 countries, 54,000 sites, 4.4+ million courses)**

**moodle**

41+ million users in 211 countries, 54,000 sites, 4.4+ million courses

**Social Networking Gaming**  
**December 24, 2010: CityVille 16.8 million daily users, FarmVille's 16.4 million. CityVille 61.7 million monthly users, FarmVille 56.8 million users. Mashable.**

"CityVille" Is Now Bigger than "FarmVille"

**FRONTIERVILLE**  
 You're the Mayor of a Wild & Tamed Frontier Town

**FARMVILLE**  
 You're the Farmer of a Farm & Farmhouse

**CityVille**  
 PLAY NOW

**Catastrophes**

**HURRICANE IKE**

**HAITI**  
 Earthquake epicenter

**Ten great sites with free teacher resources**  
**eSchool News, Jenna Zwang, Feb 18, 2011**  
<http://www.eschoolnews.com/2011/02/18/ten-great-sources-of-free-teacher-resources/ark/>

**LIBRARY OF CONGRESS**

**PBS Teachers**

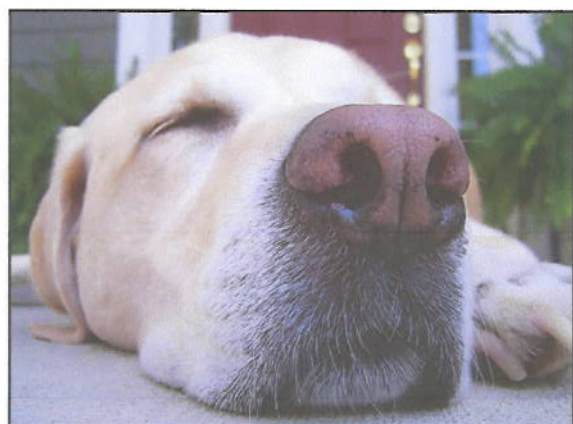
**Curriki**

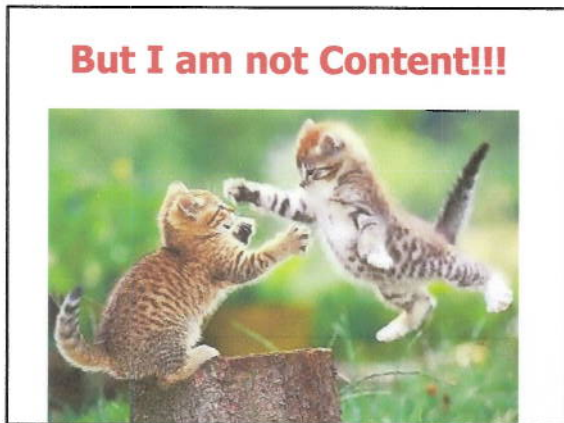
**NSDL**

**teachersdomain**

**teAchnology**

**Thinkfinity** | **vorix foundation** | **connexions**





**May 24, 2010**  
**Author Nicholas Carr, The Web Shatters Focus, Rewires Brains, Wired**  
[http://www.wired.com/magazine/2010/05/ff\\_nicholas\\_carr/](http://www.wired.com/magazine/2010/05/ff_nicholas_carr/)

### Question: What is the Web?

- An entertainment system?
- A writing aid?
- A communications system?
- A means to handle commercial transaction?
- A social networking device?

=====

**No, it is a learning tool!**

### Answer: The Web of Learning

NING

### We are entering a jumping off point...

Elements of the Web's Next Generation

### Nature AND Nurture: Pedagogy

Nature (Technology) Nurture (Pedagogy)

People, Society, Culture, etc.

### We are not motivating students with the technologies that they love

### Jumbo Motivation is Needed!

### Ok, Million Dollar Question: How do you motivate online learners? What Words come to mind?

### Intrinsic Motivation

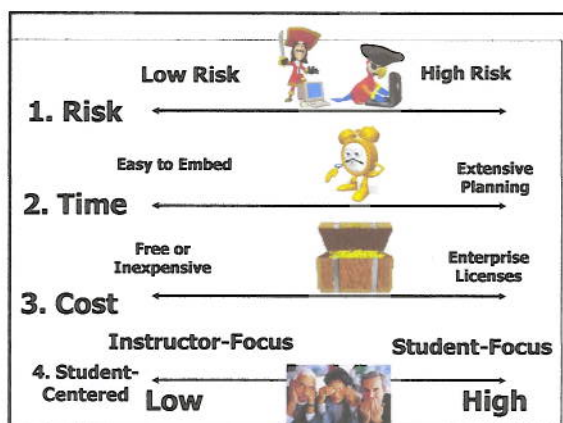
“...innate propensity to engage one’s interests and exercise one’s capabilities, and, in doing so, to seek out and master optimal challenges  
 (i.e., it emerges from needs, inner strivings, and personal curiosity for growth)

See: Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. NY: Plenum Press.

### I even reflected on this for a moment...and then something magical happened...

**The TEC-VARIETY Model for Online Motivation and Retention**

1. **Tone/Climate:** Psych Safety, Comfort, Belonging
2. **Encouragement, Feedback:** Responsive, Supports
3. **Curiosity:** Fun, Fantasy, Control
- ...
4. **Variety:** Novelty, Intrigue, Unknowns
5. **Autonomy:** Choice: Flexibility, Opportunities
6. **Relevance:** Meaningful, Authentic, Interesting
7. **Interactive:** Collaborative, Team-Based, Community
8. **Engagement:** Effort, Involvement, Excitement
9. **Tension:** Challenge, Dissonance, Controversy
10. **Yields Products:** Goal Driven, Products, Success, Ownership



**1. Tone/Climate: (open, inviting)**  
A. Create a Class Wiki (Wikispaces)

The screenshot shows a Wikispaces page titled "Welcome to Mrs. Snow's wiki." It features a navigation bar with "home", "pages", "resources", "help", and "my wiki". The main content area includes a welcome message and a search bar. The page is designed to be open and inviting for students.

**1. Tone/Climate: B. Video Course Intros from Instructors.**  
Yun Yun Chow, Open U Malaysia  
Making Art Lessons Come Alive with Web 2.0  
<http://www.youtube.com/watch?v=B09rqJD1GXo>

The screenshot shows a YouTube video player with the title "Making Art Lessons Come Alive with Web 2.0". The video shows a group of students sitting around a table, engaged in a discussion. The video is part of a course by Yun Yun Chow at Open U Malaysia.

**2. Encouragement, Feedback, etc.:**  
A. New Self-testing Skills.  
High School Student Self-Testing (e.g., Calm Chemistry)

The screenshot shows the Calm Chemistry website, which features a virtual chemistry laboratory. The page includes a navigation bar, a search bar, and a main content area with a video player and a map. The website is designed to provide a self-testing experience for high school students.

**2. Encouragement, Feedback, etc.:**  
B. Tutorials with Screen Capture (e.g., Jing, Screenr)

The screenshot shows the Jing and Screenr websites. The Jing website is a screen capture tool that allows users to create a picture of their screen, present slides of recorded action, and stream instantly over the web. The Screenr website is a screen capture tool that allows users to create a video of their screen, present slides of recorded action, and stream instantly over the web.

**2. Encouragement, Feedback, etc.:**  
**C. Vocab Sushi (\$25 for 3 months)**

<http://www.vocab sushi.com/>



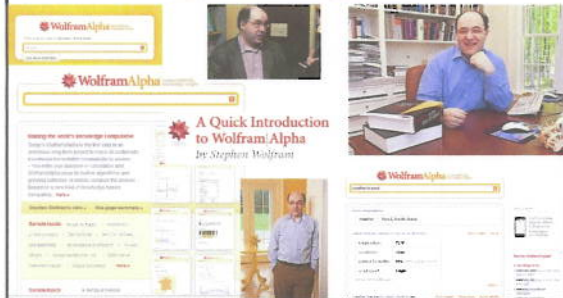
**3. Curiosity, Fun:**  
**A. Online News (March 11, 2011, Tsunami hits Japan)**

<http://www.cnn.com/video/7/video/world/2011/03/11/nat.ahh.japan.earthquake.tsunami.ahh&ref=NS1>



**3. Curiosity, Fun: B. WolframAlpha**  
**(access knowledge)**

<http://www.wolframalpha.com/>



**3. Curiosity, Fun: C. Adventure Learning, GeoThentic, Earthducation, Polar Husky, GoNorth (Aaron Doering, Univ of Minnesota)**




**3. Curiosity, Fun: D. Live Science**  
**(Nautilus Live allows people to watch expeditions live & listen to scientists in control rooms a discoveries made)**




**4. Variety, Novelty: A. Bridges to World of Expert and Practitioners (e.g., Watch or Listen to Online Conferences, Expert blogs, chats, interviews)**




**5. Autonomy, Choice:**  
**A. Famous Person Web Explorations, Searches, Twitter Tracking, and Interviews**  
 (e.g., famous Australian actors)





**5. Autonomy, Choice: B. Explore Online Museums, Zoos, Library Exhibits**  
 (e.g., Museum of Online Museums or MoOM)




**3. Curiosity, Fun: C. Online Historical Documents** (e.g., United Nations Open World Digital Library, (e.g., Turning The Pages, British Library)



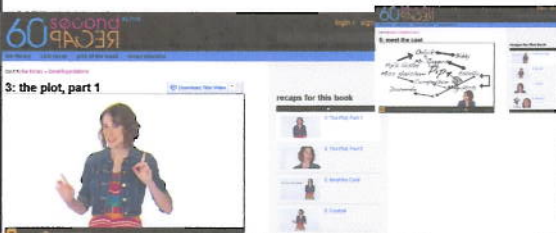
**5. Autonomy, Choice: D. Explore Famous People in History (Samuel Pepys and Phil Gyford, UK)**



**5. Autonomy, Choice:**  
**E. Online Portal Explorations**



**6. Relevance, Meaningfulness:**  
**A. 60 Second Recap, Jenny Sawyer**  
<http://www.60secondrecap.com/>  
 Actress to students: Lend me your earbuds!  
 English major, 24, rambunctiously recaps the classics in 60-second Web videos; By Greg Toppo; USA TODAY, September 2009





**6. Relevance, Meaningfulness:  
B. Virtual Congress (Documents, photos, maps, speeches, cartoons, letters, songs, journals/diaries, autobiographies, artifacts, etc.)**  
<http://www.tpscongress.org/index.php>

**6. Relevance, Meaningfulness:  
C. Chronicling America: Historic American Newspapers**  
<http://chroniclingamerica.loc.gov/>

**6. Relevance, Meaningfulness:  
D. Google Art Project (new Google project that allows visitors to explore museums around the world and view hundreds of artworks)**  
<http://www.googleartproject.com/>

**7. Interactive, Collaborative:  
A. Collaborative Documents (Google Docs)**

	Cheese	Sausage	Crackers
1	Munster	Sausage	Ritz
2	Cheddar	Breakfast	Tostitos
3	Swiss	Pepperoni	Santitas
4	Mozzarella	Mortadella	Melba Toast
5	Edam	Salami	Wheat Thins
6	Gouda	Swiss Italian	Quilfish

**7. Interactive, Collaborative:  
B. Online Language Learning (Skype with Mixer, Livemocha, Friends Abroad)**

**7. Interactive, Collaborative:  
C. Comment on Environmental Blogs (e.g., Cassandra Brooks, Science Writer and Multi-Media Producer; <http://www.cassandrabrooks.com/blog.php>)**

**7. Interactive, Collaborative:**  
**D. Videoconferencing** (e.g., Int'l Studies for Indiana Schools (i.e., ISIS); Mandarin Chinese, Niger, Sudan, (Deb Hutton, Indiana Univ., Mimi Miyoung Lee, Univ of Houston))

**7. Interactive, Collaborative:**  
**E. Horizon and Flat Classroom Projects** (combine blogs, videoconferencing, chat, async discussion, etc.)

**7. Interactive, Collaborative:**  
**F. Global Class Collaboration and Problem Solving** (e.g., ePals, iEARN, and World Class)

**7. Interactive, Collaborative:**  
**G. Virtual Tours and Timelines** (i.e., HyperHistory; <http://simile.mit.edu/timeline/>)

**7. Interactive, Collaborative:**  
**H. Videos of the Periodic Table**

**8. Engagement, Effort:**  
**A. Immediate Science Ida (a transitional species) 47-Million-Year-Old Fossil the Missing Link?** (May 20, 2009)

**8. Engagement, Effort:**  
**B. History for Music Lovers: The French Revolution ("Bad Romance" by Lady Gaga)**  
<http://www.youtube.com/user/historyteachers?feed=6&ob=5&prf=12&AJLCoIsgpA>

**8. Engagement, Effort:**  
**C. Interact with former presidents (e.g., Dr. Monica Rankin's class, UT Dallas, Cuban Revolution, April/May 2011)**  
<http://www.youtube.com/watch?v=ocQMf1kPo98>

**8. Engagement, Effort:**  
**D. Virtually Tour a Museum (e.g., British Museum, Smithsonian, Louvre)**

**8. Engagement, Effort:**  
**E. Time Tracker (e.g., Indy Race Tracker, May 29, 2011)**  
<http://www.indy.com/story/indyrace/2011/05/29/2011-indy-500-race-tracker>

**8. Engagement, Effort:**  
**F. Timeline Tools (e.g., technology in education, NY Times, September 19, 2010)**  
<http://www.nytimes.com/interactive/2010/09/19/magazine/classroom-technology.html?ref=magazine>

**9. Tension, Challenge, etc.:**  
**A. Controversial Science (e.g., *Ida* (a transitional species) 47-Million-Year-Old *Darwinius Masillae* Fossil the Missing Link? (wowOwow, May 20, 2009)**

### 10. Yields Products, Goals: A. Video Blogs

Stone Middle School Science Fair Results

Place Award Winners at the 2010 Stone Science Fair

Special Awards:  
 1st Place: [Name]  
 2nd Place: [Name]  
 3rd Place: [Name]

### 10. Yields Products, Goals: B. Student YouTube Products

<http://www.youtube.com/watch?v=xIwS1ryPzsQ>  
[http://www.youtube.com/watch?v=x3FJy4Pn\\_E](http://www.youtube.com/watch?v=x3FJy4Pn_E)  
<http://www.youtube.com/watch?v=eD1awpaSuP0>  
[http://www.youtube.com/watch?v=BPT8DNkycYM#feature=player\\_profilepage](http://www.youtube.com/watch?v=BPT8DNkycYM#feature=player_profilepage)

### "Video Primers in an Online Repository for e-Teaching and Learning" V-PORTAL, TravelinEdMan (27 free/open YouTube videos), September 2010

<http://www.youtube.com/user/TravelinEdMan>

### 10. Yields Products, Goals: C. Photo Festivals and Competitions (e.g., Scrapblog, flickr, etc.)

### 10. Yields Products, Goals: D. Concept Mapping Tools (VUE, Bubbl.us, Cmap, Freemind, Giffy, Mindmeister, or Mindomo)

MathET Learning Projects

**bubbl.us**


Mindmaps

- Unit 1: Problem Solving, Functions, Reasoning
- Unit 2: Number Theory

### TEC-VARIETY Model for Online Motivation and Retention




**Tone/Climate**  
 Encouragement, Feedback  
 Curiosity

**Variety**  
 Autonomy  
 Relevance  
 Interactive  
 Engagement  
 Tension  
 Yields Products







## Do you feel JUMBO MOTIVATION?

**Note:** Bonk papers and talks at:  
<http://www.publicationshare.com/>  
<http://www.trainingshare.com/>







## Poll: How many ideas did you get...so far?

1. 0 if I am lucky.
2. Just 1.
3. 2, yes, 2...just 2!
4. Do I hear 3? 3!!!!
5. 4-5.
6. 5-10.
7. More than 10.

## Addressing Diverse Learners with R2D2





## Frame work #2: The R2D2 Model

Curtis J. Bonk | Ke Zheng


### Empowering Online Learning

100+ Activities for Reading, Reflecting, Displaying & Doing





## The R2D2 Method

1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)



## 1. Auditory or Verbal Learners


- Auditory and verbal learners prefer words, spoken or written explanations.

### Read 1a. Online Article Portals and Databases

<http://r685articledatabase.weebly.com/>  
<http://ella.slis.indiana.edu/~bahalloc/r685/>  
[http://php.indiana.edu/~cjbok/Syllabus\\_R685\\_Spring\\_of\\_2011.htm](http://php.indiana.edu/~cjbok/Syllabus_R685_Spring_of_2011.htm)

ARTICLE DATABASE FOR R685 CLASS



Spring of 2011 R685 Topical Seminar, 3 Credits  
 "The World is Open with Web 2.0 Technology" (aka, the Web 2.0)  
 Indiana University, School of Education  
 12/20/2010-01/01/2011

Online Technology Weekly Meeting to Review (or arrange) Research (on Book, Podcast, Instructional System, Technology Use)

For more articles see: [http://www.slis.indiana.edu/~cjbok/Syllabus\\_R685\\_Spring\\_of\\_2011.htm](http://www.slis.indiana.edu/~cjbok/Syllabus_R685_Spring_of_2011.htm)  
 "Global Web 2.0 Technology and the 21st Century Learning Environment" (on Book, Podcast, Instructional System, Technology Use)

Topic: Online Learning

The World is Open with Web 2.0 Video Resources

Webinar!

1. Data Anderson (2008). Towards a Theory of Online Learning: The Theory and Practice of Online Learning (2nd ed). New York: Routledge.

2. Data Anderson (2008). Towards a Theory of Online Learning: The Theory and Practice of Online Learning (2nd ed). New York: Routledge.

3. Data Anderson (2008). Towards a Theory of Online Learning: The Theory and Practice of Online Learning (2nd ed). New York: Routledge.

4. Data Anderson (2008). Towards a Theory of Online Learning: The Theory and Practice of Online Learning (2nd ed). New York: Routledge.

### Read 1b. Course Announcements (e.g., Teaching with Twitter)



twitter

### Read 1c. History Podcasts and Podcast Shows



TO THE POINT


### Read 1d. Cultural Blogs (e.g., Dr. Kim Foreman, San Fran State University, Come and See Africa Blog; <http://comeandseeafrica.blogspot.com/>)



Come and See Africa (CASA)

### 2. Reflective and Observational Learners

- Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives



### Reflect 2a. Teacher Classroom Blogs



Mrs. Huff's English Classes

Miller's English 10 Classroom Blog

**Reflect 2b. Scientist Blog Reflections (The LAST OCEAN Website and The Last Ocean Project; Cassandra Brooks)**

**Reflect 2c. Reuse Blog Posts, Chat Transcripts, Interviews, Conferences, Online Presentations**

**Reflect 2d. Track Life of a Scientist or Famous People (e.g., Brian J Ford, independent scientist, John Medina)**

<http://www.youtube.com/user/tellymonitor#p/u/1/LhG6AostKasc>

**3. Visual Learners**

- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.

**Display 3a. Anchored Instruction with Shared Online Video**

**Display 3b. Online Timelines (US Presidents)**

### Display 3c. Explore Virtual Worlds and Online Representations (e.g., Rome Reborn 1.0, University of Virginia, UCLA)

### Display 3d. Download and Use Online 3D Sketches (e.g., Google SketchUp)

### 4. Tactile/Kinesthetic Learners

- Tactile/kinesthetic senses can be engaged in the learning process are role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.

### Do 4a. Kids Blogs (e.g., Kids Like Blogs; Jon Schwartz, Oceanside, CA)

[http://kidslikeblogs.org/elementary\\_student\\_blogs.html](http://kidslikeblogs.org/elementary_student_blogs.html)

### Do 4b. Wikibook and Wikipedia Editing

### Do 4c. Student Work in a Wiki (e.g., Wet Paint, a free wiki tool for online collaboration; e.g., medical education)

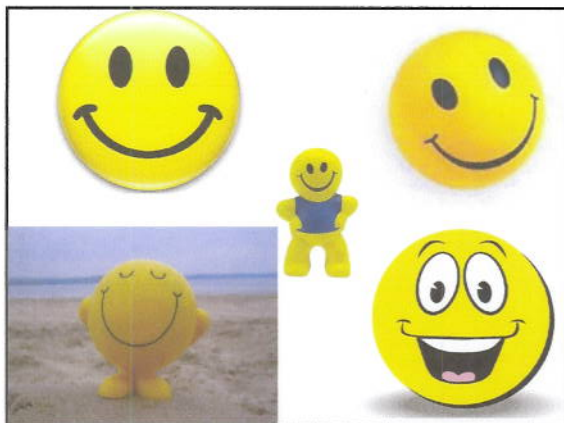


**Do 4d. Podcast Productions and Shows (give kids the power!)**



**Poll: How many ideas did you get from the second part of this presentation on R2D2?**

- a. None—you are an idiot.
- b. 1 (and it is a lonely #).
- c. 2 (it can be as bad as one).
- d. 3-5
- e. 6-10
- f. Higher than I can count!



**Try the R2D2 Method!  
Try TEC-VARIETY!  
Questions and Comments?**

Slides at: [TrainingShare.com](http://TrainingShare.com)  
Papers: [PublicationShare.com](http://PublicationShare.com)  
Book: <http://worldisopen.com/>  
Email: [curt@worldisopen.com](mailto:curt@worldisopen.com)

